



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,430	03/01/2004	Carl Frederick Behr	38-21(52258)C	9938
27161	7590	02/23/2005		
MONSANTO COMPANY 800 N. LINDBERGH BLVD. ATTENTION: G.P. WUELLNER, IP PARALEGAL, (E2NA) ST. LOUIS, MO 63167			EXAMINER CHUNDURU, SURYAPRABHA	
			ART UNIT 1637	PAPER NUMBER

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/790,430	<b>Applicant(s)</b> BEHR ET AL.	
	<b>Examiner</b> Suryaprabha Chunduru	<b>Art Unit</b> 1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7,9,11,13 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7,13 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                               |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/5/2004</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. Applicant's election with traverse of Group I (claims 7, 13, and 16) in the reply filed on February 3, 2005 is acknowledged. The traversal is on the ground(s) that examining both the groups I and II would not constitute a serious burden on the examiner. This is not found persuasive because of the following reasons: (i) a search for one group does not necessarily result in art related to another group that is, in the instant case, prior art search for primers and probe DNA molecules of Group I would not be co-extensive with prior art search for a method in Group II; Similarly, a search indicating that the product is known or would have been obvious would not extend to a holding that the process is known or would have been obvious, (ii) separate classification search is prima facie evidence of burden, (iii) the issues are not the same with respect to 35 U.S.C. 112 and 35 U.S.C. 101 statutes, Further, Claims in Group I are drawn to a nucleic acid molecule and the claims in Group II are drawn to method which can be used independently in a materially different processes as discussed in the restriction requirement. Hence the restriction requirement is still deemed proper and is made FINAL.

***Status of Application***

2. Claims 7, 9, 11, 13 and 16 are currently pending. Claims 1-6, 8, 10, 12, 14-15 are cancelled by the Preliminary Amendment filed on March 1, 2004. Claims 7, 13, and 16 are considered for examination in this office action. Claims 9 and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected.

***Information Disclosure Statement***

3. The Information Disclosure Statement filed on August 5, 2004 has been entered and considered.

***Priority***

4. This application filed on March 3, 2004 is a divisional of US non-provisional 09/872,051 filed on 6/01/2001, now a patent 6,825,400, which claims benefit of US provisional 60/213,567 filed on 6/22/2000, 60/240,014 filed on 10/13/2000 and 60/241,215 filed on 10/13/2000.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 13 is drawn to a DNA molecule, a natural product, and a non-statutory subject matter. Amendment to recite Isolated or purified DNA molecules would obviate the rejection.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13, recites "a DNA molecule selected from the group consisting of SEQ ID No:9, SEQ ID No: 10, SEQ ID No: 11, SEQ ID No: 12, and complements thereof". The meets and bounds of the claim are not clear and indefinite because it is unclear whether the claim refers to open or closed language, that is, whether the recited SEQ ID No. refer to DNA molecules

Art Unit: 1637

selected from “sequences comprising recited SEQ ID No. or “ sequences consisting of said SEQ ID No.” Amendment is required as to Applicant’s intent.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

A. Claims 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Sigma Catalog (Molecular biology Products, oligonucleotides, page 1565, 1997).

Sigma Catalog teaches hexanucleotide primers containing all possible sequences that function as primers and as hybridization probes (see page 1565) that are equivalent with the claimed pair of DNA molecules of Claim 7, that recites DNA molecules comprising “a sufficient length of contiguous nucleotides of SEQ ID NO. 7” . Since within the pool of hexamers or hexanucleotides of SEQ ID 7, there is a subset which would function as specific primers or

Art Unit: 1637

probes as claimed. Since the claims are interpreted as open "comprising" format, the complete mixture comprises these specific hexamers as primers or probes.

B. Claims 7 is rejected under 35 U.S.C. 102(b) as being anticipated by McElory et al. (USPN. 5,641,876) ('876).

McElory et al. teach a pair of DNA molecules of claim 7 comprising sufficient length of contiguous nucleotides of SEQ ID No. 7 (see sequence alignment for a sufficient length of contiguous nucleotides of SEQ ID No. 7 with the SEQ ID No. 4 (first DNA molecule) and SEQ ID No. 5 (second DNA molecule) of the patent '876, also see col. 27-34 for SEQ ID No. 4, and col. 34-36 for SEQ ID NO. 5 of the patent '876). As stated in MPEP 2112- Products of identical chemical composition can not have mutually exclusive properties. "A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The DNA molecules as disclosed by McElory et al. have identical composition and hence would have similar properties (function as probes) as claimed. Thus the disclosure of McElory et al. meets the limitations in the instant claims.

C. Claims 7 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Barry et al. (USPN. 6,448,476).

Barry et al. teach a pair of DNA molecules of claim 7 comprising sufficient length of contiguous nucleotides of SEQ ID No. 7 (see sequence alignment for a sufficient length of contiguous nucleotides of SEQ ID No. 7 with a fragment position 1-202 of SEQ ID NO. 27 (first DNA molecule) and with a fragment 2239-2378 of SEQ ID No. 27).

With regard to claim 16, Barry et al. also teach a kit comprising DNA molecules (see col. 7, line 1-10).

As stated in MPEP 2112- Products of identical chemical composition can not have mutually exclusive properties. "A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Since the DNA molecules as disclosed by Barry et al. have identical composition, the said molecules would have similar properties (function as probes) as claimed. Thus the disclosure of Barry et al. meets the limitations in the instant claims.

D. Claims 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Marra et al. (EST, 1996).

Note: the following rejection is based on the rejection under 35 USC 112, interpreting the claim as open language "comprising" format, that is, sequence comprising the claimed SEQ ID NO.11.

Marra et al. teach a DNA molecule of claim 13 comprising DNA molecule having absolute homology with the claimed of SEQ ID No. 11 (see sequence alignment for SEQ ID No. 11). Thus the disclosure of Marra et al. meets the limitation in the instant claim.

### ***Conclusion***

No claims are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M , Mon - Friday,.

Art Unit: 1637

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Suryaprabha Chunduru  
Examiner  
Art Unit 1637

  
JEFFREY FREDMAN  
PRIMARY EXAMINER  
